Testimony of
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Financial State of the Airline Industry

U.S. House of Representatives
Committee on Transportation and Infrastructure
Subcommittee on Aviation

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Good morning Mr. Chairman, Congressman DeFazio, and members of the subcommittee. I am pleased to have this opportunity to appear before you today to discuss the current state of the U.S. Airline Industry.

The views and analysis presented below represent our assessment of the financial state of the U.S. airline industry from the vantage point of a financial analyst. We divide the discussion below into seven sections, overview comments on the financial state of the industry and the need for further restructuring, an assessment of cost reduction/profit improvement initiatives undertaken by the airlines, a discussion of the challenging revenue environment facing the industry, analysis of cost pressures on the industry, a discussion of the growing threat from low-fare carriers, views on the future of the hub and spoke model, and summary conclusions.

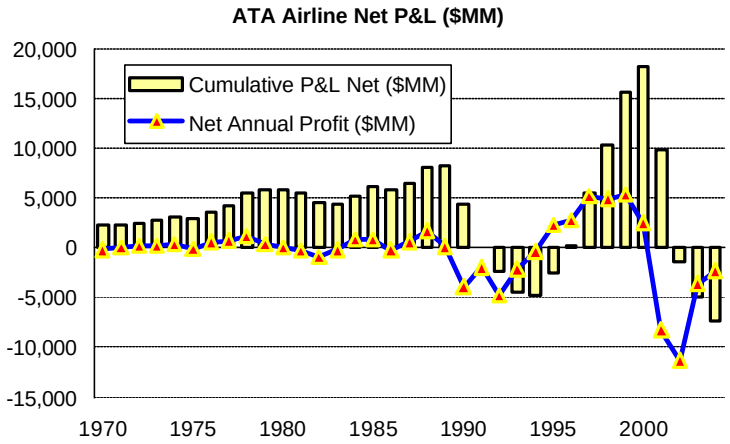
I. AIRLINE INDUSTRY AT LARGE STILL IN DURESS; NETWORK AIRLINES NEED TO RESTRUCTURE FURTHER

We find that the U.S. airline industry at large is still in financial peril. From our vantage point, the underlying economics and financial characteristics for a vast portion of the industry are largely unchanged as successful efforts by the network airlines to restructure have met a growing list of challenges. In our view, the next several years will be difficult for the traditional network airlines.

Historical Profitability Track Record for the Industry is Abysmal, This Cycle Will Not Likely Be an Exception

With a single exception (Southwest Airlines), the U.S. airline industry has been a financial disappointment, at least when viewed in a longer-term context. The industry has historically suffered from large boom and bust cycles through which losses experienced during industry downcycles have more than offset profits generated in better times (Figure 1). This cycle is no exception. Despite record profits generated in the boom years of the late 1990s, we expect that losses generated between 2001 and 2005 will again consume the earnings generated during the peak of the cycle.

Figure 1 – Losses Generated During Industry Downcycles Have More than Offset Profits Generated During the Peaks



Source: Air Transport Association, Company reports, Lehman Brothers estimates.

Continued Development of Low-Fare Carriers Argues for a Division of the Industry into Two Sub-Segments Going Forward

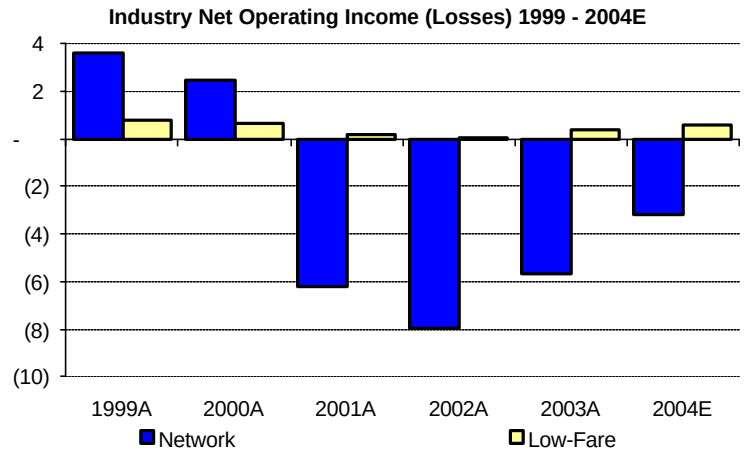
The "industry" has historically been dominated by the network, or major, airlines, but we believe the industry increasingly divides into two sub-segments. There are many different labels for these two segments, but the substantive differences between the two sectors is unaffected by the label used. For purposes of this analysis, we will refer to the two segments as the network carriers (American, Continental, Delta, Northwest, United, and US Airways) and the low-fare carriers (AirTran, America West, Alaska, Frontier, JetBlue, and Southwest, among others). Other labels for the network airlines include Legacy Carriers, the Big Six, the Major Airlines, etc. Other labels for low-fare carriers include Discount Carriers, and Low-Cost Carriers (LCCs), among others.

Given the historical dominance of the network airlines, past profitability characteristics of the industry are predominantly a reflection of network airlines' performance. However, the combination of continued growth by Southwest and the development of what we believe to be increasingly capable low-fare carriers (AirTran and JetBlue are two good examples) argues for a distinction going forward in analyzing industry profitability.

We Expect Continued Profitability for the Low-Fare Carriers While Network Airlines Continue to Struggle

Despite enormous realized losses for the Network Airlines over the last several years, low-fare carriers (limited in this testimony to those we actively follow – America West, AirTran, Alaska, JetBlue, and Southwest) have been profitable as a group (Figure 2). We expect that profitability to continue for the foreseeable future despite record high fuel prices and a challenging revenue environment (both addressed below).

Figure 2 – We Expect Low-Fare Carriers to Remain Profitable Despite Challenges While Network Airline Losses Continue

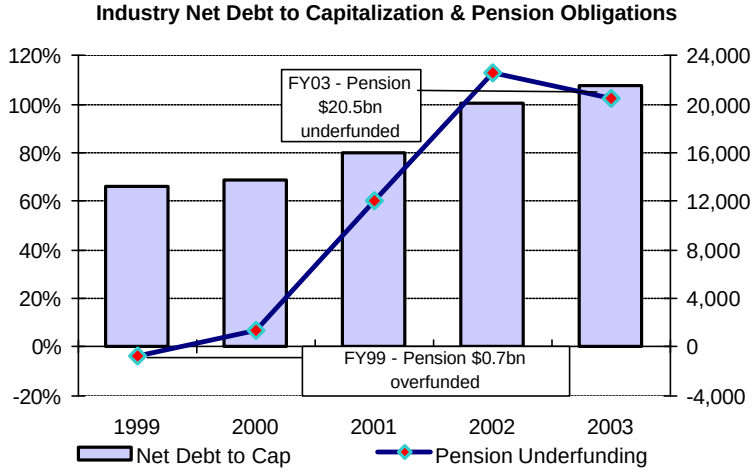


Source: Company reports, Lehman Brothers estimates.

Network Airlines Need to Restructure Further

Despite successful efforts over the last several years to improve profitability, we believe the network airlines must act to further reduce cost and increase flexibility. A number of challenges (a weak revenue environment, high fuel prices, and continued development of low-fare carriers most important among them) make that restructuring inevitable in our view. The need for further restructuring is perhaps best illustrated in the soaring financial obligations the industry has incurred as a direct result of operating losses over the last few years (Figure 3).

Figure 3 – Rising Debt and Pension Obligations Underscore the Need for Further Restructuring



Source: Company reports.

Unfortunately, we believe the restructuring process will be a painful one that could take a toll on many stakeholders. Those stakeholders might include employee groups, lessors and creditors, equipment suppliers and service providers, and municipalities. In the absence of contributions from these constituencies, we see continued financial pressure for the network airlines going forward.

While we believe cost reduction is necessary, we also believe that the network airlines should move to increase operational flexibility. Given the volatile nature of demand for air travel, we believe the industry should address two major factors to mitigate boom and bust cycles in the future:

1. **A disconnect between the supply and demand for the product.** While the demand for air travel is extremely fickle, aircraft delivery lead times can be 12-18 months long and airlines tend to make fleet and facilities decisions over very long periods of time. Given the volatile nature of demand, airlines must be able to move more quickly to reduce infrastructure costs (costs associated with aircraft and facilities) in industry downturns.

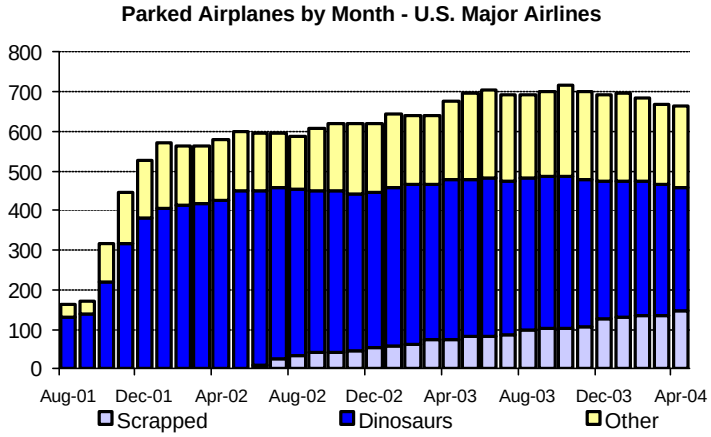
2. **Difficulty adjusting labor costs to meet the realities of a rapidly changing demand environment.** In addition to the difficulty airlines have reducing infrastructure cost in weaker periods, the industry has also had difficulty adjusting labor costs to meet rapid changes in the demand environment. Given that labor costs tend to comprise 35-40% of operating costs, airlines need to be able to adjust these costs to the realities of the demand environment more quickly.

We believe that an effective restructuring of the network carriers would include risk reduction measures to address the two issues highlighted above in tandem with cost reduction. In exchange for reduced risk, however, the network airlines would have to share profits generated during better times with the stakeholders who share cyclical risks.

II. THE NETWORK AIRLINES HAVE UNDERTAKEN MUCH RESTRUCTURING SINCE 2001, BUT MORE LIKELY REQUIRED

Since 2001, the network airlines have undertaken initiatives to improve operating results. These initiatives include deferrals of aircraft deliveries, accelerated retirements of aircraft, elimination of inefficient aircraft types, changes to distribution strategies, reductions in headcount, and process improvements, among others. The network airlines have parked in the desert or scrapped more than 400 older, less efficient aircraft since 2001 (Figure 4 - we label these fleet types dinosaurs) and, unfortunately, have reduced headcount by more than 90,000 (Figure 5).

Figure 4 – Network Airlines Have Parked More than 400 Older Aircraft



Source: AirClaims.

Figure 5 –Airlines Have Reduced Headcount by More than 90,000

Airline Industry Headcount Trends

Carrier	1999	2000	2001	2002	2003
AA (1)	110	112	92	99	85
AS	9	10	10	10	10
B6	-	1	2	3	4
CO	42	44	44	38	40
DL	72	71	70	65	65
F9	2	2	2	2	2
FL	4	4	4	5	5
HP	11	12	12	12	13
NW	51	52	50	45	40
UA	93	95	94	75	59
US	40	43	34	31	27
WN	27	29	31	33	33
Total	462	474	445	420	383

(1) AA totals include TW prior to acquisition in 2001.
Source: DOT Form 41, company reports.

The initiatives undertaken have a lot of common elements, but vary in certain aspects between different carriers. Importantly, implementation of the initiatives has produced results. For purposes of assessing the impact of these initiatives, we have analyzed changes in unit costs, or in airline lingo, Costs per Available Seat Mile (CASM). Available seat miles are a widely accepted proxy for capacity in the airline industry. We also provide in Appendix 1 a legend of the airline designator codes we use in the charts and tables below.

Despite Higher Insurance Costs, Airline Initiatives Have Generated Non-Labor Unit Cost Savings for the Industry

Since 2001, the cost of insurance has risen substantially for the airline industry. We suspect that war risk insurance is a major reason for the cost increase. Public documents do not contain enough information to assess the rising costs of war risk insurance, but a review of financial data filed with the Department of Transportation reveals drastic increases in overall insurance expense for the industry (Figure 6). Despite those rising insurance costs, however, our analysis suggests that the industry at large has reduced its non-labor unit costs since 2001.

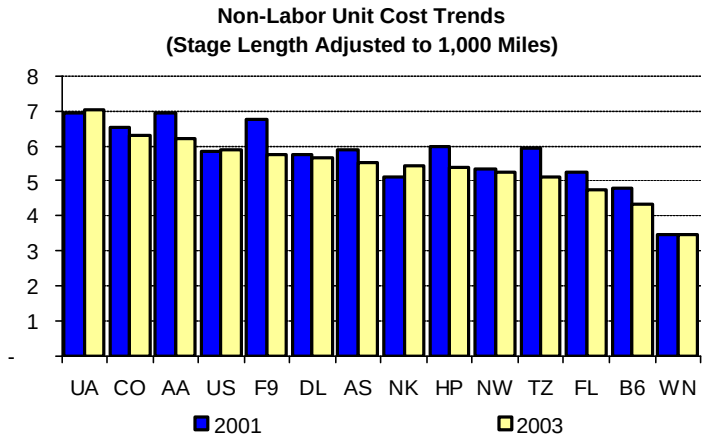
Figure 6 – Rising Insurance Costs Have Pressured Industry Financials

Airline Inustry Insurance Cost Trends

Carrier	1999	2001	2003
AA	$ 40	$ 69	$ 216
AS	3	14	27
B6	-	5	20
CO	23	21	39
DL	35	32	50
F9	4	5	5
FL	3	5	8
HP	7	8	18
NW	22	23	38
UA	37	38	81
US	28	26	48
WN	16	15	38
Total	$ 217	$ 261	$ 589

Source: DOT Form 41.

Figure 7 – Despite Rising Insurance Costs, The Industry Has Reduced Non-Labor Unit Costs Since 2001

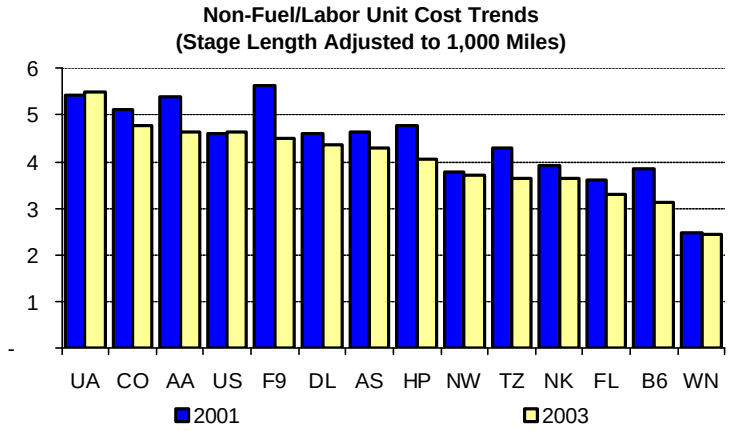


Source: DOT Form 41, Company reports, Lehman Brothers estimates.

Non-Labor Cost Reductions More Impressive When Viewed in the Context of Rising Fuel Costs

While the cost savings noted above are significant, they are even more impressive in the context of rising fuel costs (discussed in more detail below). Figure 8 below shows progress excluding both labor and fuel costs.

Figure 8 – Non-Labor Cost Progress Even More Impressive When We Exclude Rising Fuel Costs

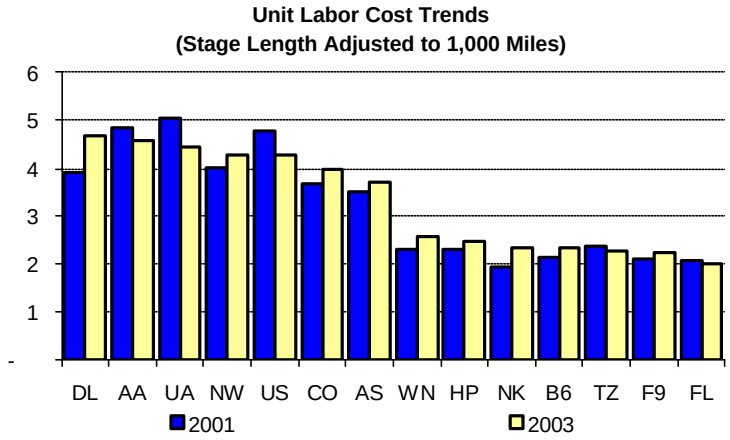


Source: DOT Form 41, Company reports, Lehman Brothers estimates.

Labor Costs Have Been Slower to Adjust, And Likely Need to Decline to Sustain Network Airlines' Competitive Viability

While non-labor costs have declined since 2001, the airlines in general have experienced upward pressure on labor costs (Figure 9). That pressure is likely the result of a variety of factors, including pay scale increases, average seniority increases, and reduced productivity on reduced capacity. Given the importance of employee costs to the airlines (approximately 35-40% of expenses for network airlines), labor savings through productivity enhancements or pay reductions or both will likely be necessary for the network airlines to remain viable competitors to the best low-fare carriers in the future.

Figure 9 – Unit Labor Costs Have Been Slower to Adjust to the Poor Industry Operating Environment

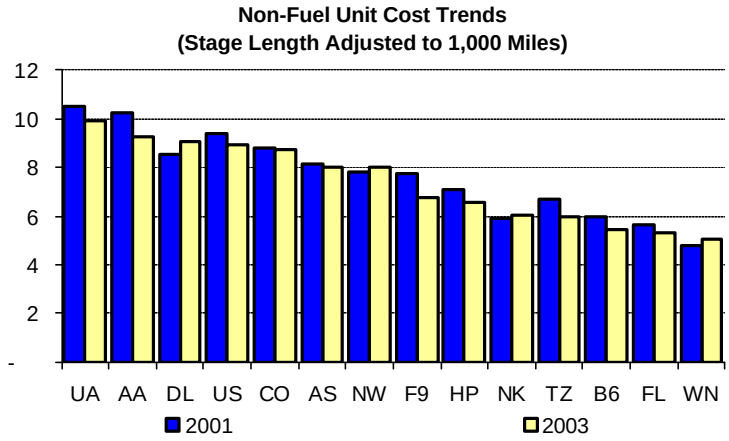


Source: Source: DOT Form 41, Company reports, Lehman Brothers estimates.

Non-Fuel Unit Costs Generally Down Since 2001 on Reduced Non-Labor Costs

Despite increases in labor costs and insurance expenses, the sum of airline industry restructuring has allowed the industry at large to reduce non-fuel unit costs materially since 2001 (Figure 10). In the absence of industry initiatives to reduce costs, the industry would be in far worse financial condition.

Figure 10 – Non-Fuel Unit Costs Down Despite Higher Labor Costs

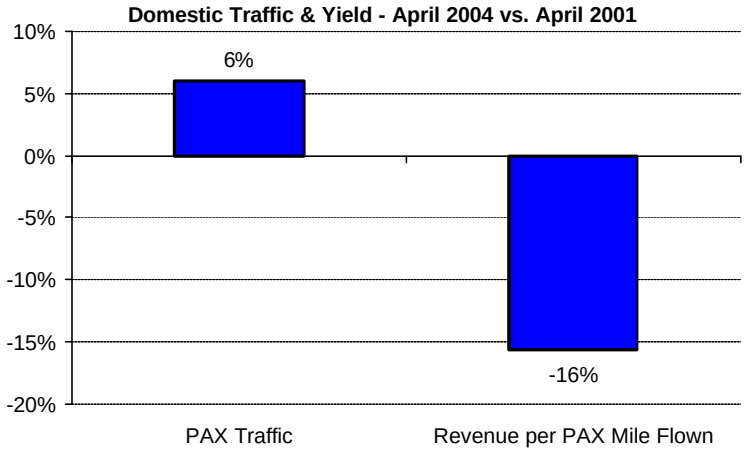


Source: Source: DOT Form 41, Company reports, Lehman Brothers estimates.

III. REVENUE ENVIRONMENT EXTREMELY CHALLENGING

While the airlines have taken steps to reduce costs and operating losses, the revenue environment facing the industry remains extremely challenging. Recent data show that passenger traffic has returned to year 2001 levels. Load factors (percentage of available seats filled) are also at or near record levels. Unfortunately, however, pricing is materially below levels realized in year 2001 (Figure 11). Since we view the demand for air travel as the combination of price and volume, we conclude that demand is materially reduced as a result. We believe that a quick return to pre-9/11 pricing is not an analytically justifiable assumption; we now believe that the decline in air travel demand depicted below is permanent. In this section, we refer at times to unit revenue, or Revenue per Available Seat Mile (RASM), which measures revenue relative to industry capacity.

Figure 11 – Traffic Has Mostly Returned to Pre-9/11 Levels, but Pricing is Materially Lower

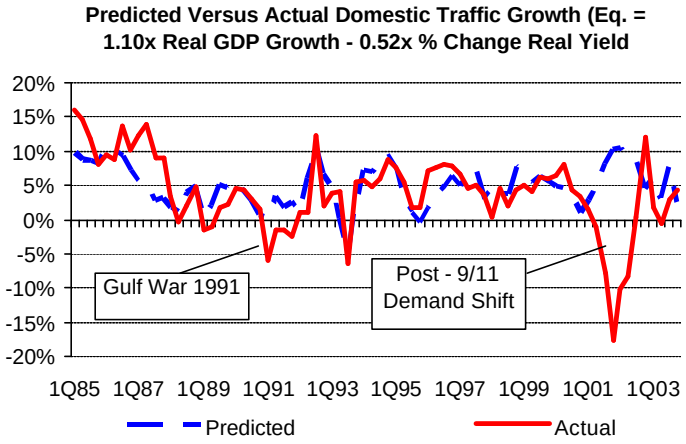


Source: Air Transport Association, company reports.

Historical Relationship Between GDP and Airline Traffic Appears Permanently Altered

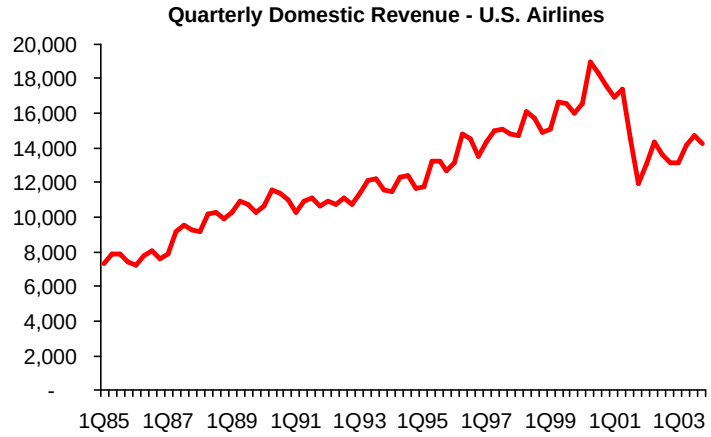
Historically, airline traffic has shown reasonable correlation to changes in Gross Domestic Product (GDP). Our analysis suggests a direct relationship between traffic growth and real GDP growth (positive correlation) and between traffic growth and percentage changes in inflation-adjusted yield or ticket prices (negative correlation). While not perfect, this relationship was helpful in forecasting the demand for air travel until the beginning of 2001 when traffic growth relative to GDP began to disappoint (Figure 12). The events of September 11th significantly widened the gap between predicted and actual traffic growth. As a result of declining traffic growth and reduced yields, domestic revenue suffered its first material decline after September 11th, 2001 (Figure 13).

Figure 12 – Relationship Between Traffic Growth, Real GDP Growth and Changes in Pricing Was Generally Reliable Until 2001; September 11th Exacerbated the Disparity



Source: DOT Form 41, Lehman Brothers estimates.

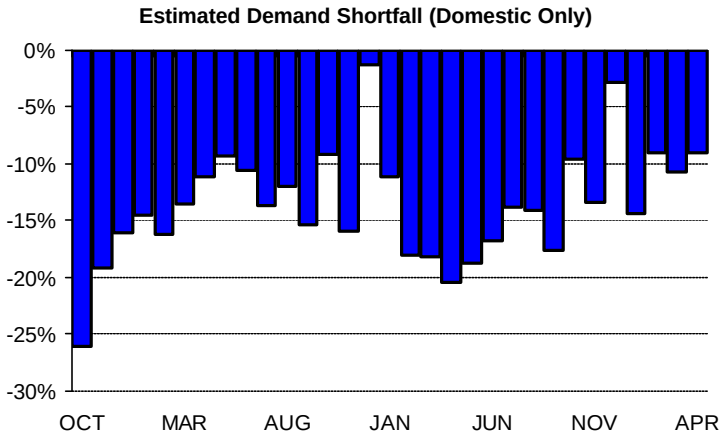
Figure 13 – Combination of Reduced Traffic and Pricing Brought First Major Revenue Decline for the Airline Industry



Source: DOT Form 41.

Using the historical relationship depicted in Figure 12 above, we now track on a monthly basis how traffic performs relative to what our old models would predict. After an initial period of improvement, our analysis suggests that improvement in the demand for air travel flattened out and has stagnated for quite some time. Given that the current demand reduction has lingered far longer than recovery periods from historical airline calamities (anywhere between 3 and 12 months), we cannot analytically justify an assumption that demand will return to pre-9/11 levels. We now believe that the demand for air travel has experienced a permanent decline. In that light, we believe the industry must achieve a cost structure that allows consistent profitability in the absence of a material demand recovery.

Figure 14 – After an Initial Recovery Period, Demand Recovery Seems to Have Flattened Out

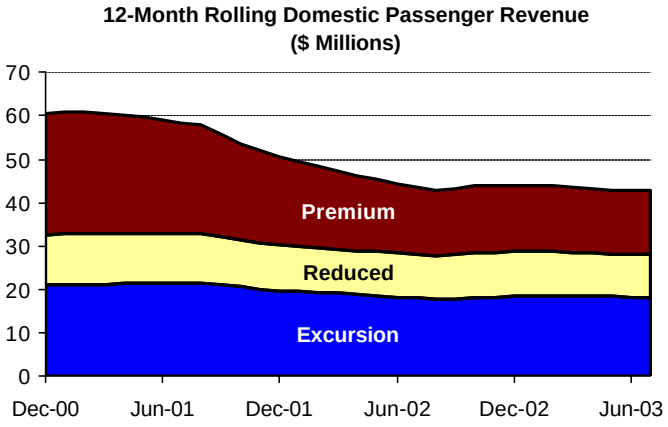


Source: Air Transport Association, DOT Form 41, company reports, Lehman Brothers estimates.

Premium Revenue Declines Explain Most of the Demand Shift

While difficult to pinpoint accurately, we believe that the biggest single factor in the demand shift we reference above is a decline in premium business traffic. The network airlines had come to rely on a very small portion of their passengers who were paying extraordinarily high fares (even in economy class). Based on several studies across the industry, reductions in "premium" traffic seem to account for nearly all the revenue decline the industry is now experiencing (Figure 15).

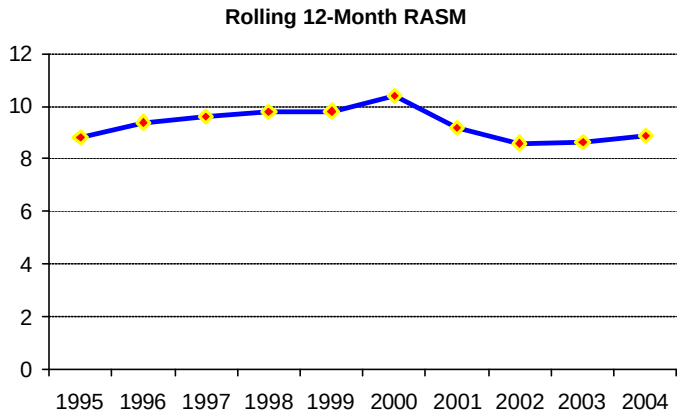
Figure 15 – Decline in Premium Revenue Explains Most of the Demand and Revenue Shortfall



Source: Air Transport Association.

We believe that a combination of factors has caused the reduction in premium revenue depicted above. In leaner times, we believe businesses have become more cost-conscious with respect to air fares. As a result, many business travelers are willing to live with more restrictions (Saturday night stay, advance purchase, etc.) in order to get lower air fares. Much more importantly, in our view, is the proliferation of increasingly capable low-fare carriers that offer lower fares, far less complexity in their fare structures, fewer restrictions, and in many cases comparable products (at least in economy cabins). We believe these two factors are the underlying cause of the decline in premium revenue the network airlines are experiencing, but we also believe the internet is making it easy for consumers of all sorts to see the differences in prices and complexity that low-fare carriers are offering and to compare pricing more easily. The decline in premium revenue has caused a major decline in industry unit revenue (Figure 16).

Figure 16 – Rolling 12-Month Domestic Unit Revenue

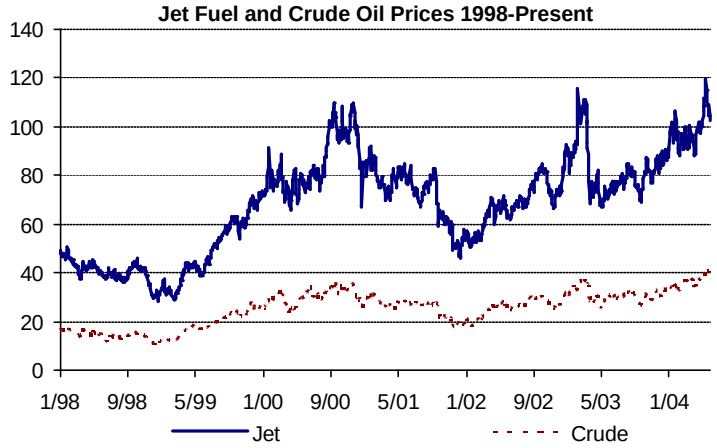


Source: Air Transport Association.

IV. FUEL PRICES ALSO HAVING A DRAMATIC IMPACT ON INDUSTRY FORTUNES; INCREMENTAL TAXES AND FEES AN ADDITIONAL BURDEN

In addition to a very weak revenue environment, the airline industry is also coping with record high fuel prices. As fuel represents 15-20% of expenses for the industry at large, increases in fuel prices are having a deleterious impact on airline profitability. Commodity prices for both crude oil and jet fuel have risen sharply in recent months (Figure 17). Over the last several years, the industry has had some ability to hedge fuel price exposure, but most carriers are significantly exposed to rising fuel costs going forward, especially the network airlines (Figure 18).

Figure 17 – Prices of Both Crude Oil and Jet Fuel Have Spiked in Recent Weeks



Source: Bloomberg.

Figure 18 – Most Carriers Significantly Exposed to Rising Fuel Costs

Airline Summary % of Fuel Exposure Hedged

Airline	2Q04	3Q04	4Q04	Comments
AA	16%	6%	6%	Capped at $32/bl.
AS	40%	30%	31%	2Q @ $28.13/bl.,3Q @ $27.44/bl.,4Q @ $26.41/bl.
B6	44%	40%	40%	$25.35/bl.; 20% of 2005 under $30.
CO	80%	45%	45%	2Q & 25% of 2H at $40/bl.; 20% of 2H @ $32/bl.
DL	0%	0%	0%	Locked in $83mm in gains in 1Q; no other hedges.
FL	25%	10%	10%	Collars; 2Q at $0.90/gal., 3Q & 4Q $0.85/gal.
HP	35%	20%	10%	Collars; ceilings $1.04/gal., floors $0.87/gal.
NW	0%	0%	0%	No fuel hedges.
WN	80%	80%	80%	Each quarter capped at $24/bl.; 80% 2005 & 30% 2006 @ $25/bl.

Source: Company reports.

Unfortunately, given the importance of fuel in the airline cost equation, changes in fuel prices have a dramatic impact on the industry. According to our analysis, every $1 increase in crude oil prices (holding refining margins constant) costs the companies we follow $280mm annually

assuming no hedge positions (Figure 19). In the current revenue environment, the airlines cannot pass these additional costs on to consumers.

Figure 19 – Airline Earnings Very Sensitive to Changes in Fuel Prices

Airline Earnings Sensitivity to $1 Change / Barrel of Crude Oil (Assumes no Hedges)

	AA	AS	B6	CO	DL	FL	HP	NW	WN	Industry
Gallons consumed*	3374	410	234	1325	2588	207	460	1785	1343	11726
$1 Change / brl.	$0.02	$0.02	$0.02	$0.02	$0.02	$0.02	$0.02	$0.02	$0.02	$0.02
Incremental Cost	$80	$10	$6	$32	$62	$5	$11	$43	$32	$279
Tax provision	0%	35%	65%	65%	65%	35%	0%	0%	65%	
Tax affected	$80	$6	$4	$21	$40	$3	$11	$43	$21	
shares	156	27	112	65	123	90	63	86	825	
FY EPS Sensitivity	**$0.51**	**$0.24**	**$0.05**	**$0.48**	**$0.50**	**$0.04**	**$0.17**	**$0.49**	**$0.04**	

* 2004 estimate.
Source: Lehman Brothers estimates.

ADDITIONAL TAXES AND FEES HAVING A SMALLER, BUT MEASURABLE IMPACT

While small in comparison with the impact of declining revenue and rising fuel prices, we also believe that additional taxes and fees levied on the industry in the aftermath of 9/11 are having a financial impact. Prior to 2001, airlines had to pay domestic ticket taxes and segment taxes along with taxes on jet fuel and destination taxes for international travel. Since 2001, the industry has also begun to pay security surcharges ($2.50 per flight segment) and "excess security fees", or the amounts by which Transportation Security Administration (TSA) expenses exceed receipts from segment fees levied from passengers. We estimate that the carriers we follow bore a tax burden of some $8bn in 2003, about $1.4bn of which was security surcharges and excess security fees (Figure 20). Again, in the current revenue environment, the industry cannot pass these additional costs along to consumers.

Figure 20 – Carriers We Follow Bore an Estimated $1.4bn in Incremental Security Fees in 2003

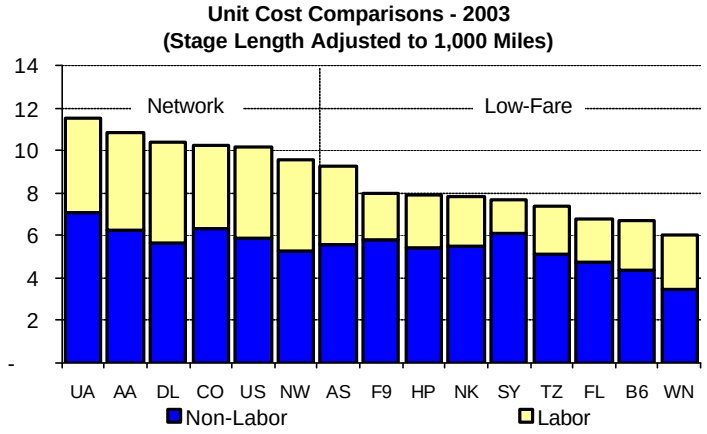
Estimated 2003 Pre-Tax Impact of Government Fees and Taxes							
	Domestic Ticket Tax	Domestic Segment Tax	PAX Security Surcharge	Jet Fuel Tax	Int'l O&D Tax	Excess Security Fee	Total Taxes and Fees
AAI	$ 66	$ 29	$ 24	$ 9	$ 0	$ 4	$ 133
ALK	160	54	44	17	14	10	299
AMR	857	240	182	141	191	43	1,655
AWA	153	57	47	18	6	9	290
CAL	414	103	77	59	91	19	764
DAL	746	302	243	104	87	40	1,522
JBLU	68	17	14	7	0	3	109
LUV	423	189	158	49	0	23	841
NWAC	392	142	111	78	73	25	821
U	388	133	107	39	38	22	727
UAL	565	179	138	99	118	32	1,132
Total	**$ 4,234**	**$ 1,444**	**$ 1,146**	**$ 621**	**$ 618**	**$ 230**	**$ 8,292**

Source: Company reports, Form 41, Air Transport Association.

V. LOW-FARE CARRIERS POSE A CLEAR AND GROWING THREAT TO THE NETWORK AIRLINES

Perhaps the biggest of the challenges facing the network airlines in the years ahead is a growing threat from increasingly capable low-fare carriers. Low-fare carriers are experiencing rapid growth in market share and have ambitious growth plans in the years ahead. These carriers operate with lower cost structures that are largely the result of higher efficiency in the use of assets and employees among other things. Many of the productivity advantages these carriers enjoy, though not all, are a result of network structure and scheduling decisions as opposed to contractual provisions. On a comparable basis, the best of these low-fare carriers operate with unit costs that are as little as 60% of most network airlines, according to our analysis (Figure 21).

Figure 21 – Best Low-Fare Carriers Operate with Costs as Little as 60% of Most Network Airlines



Source: DOT Form 41, company reports, Lehman Brothers estimates.

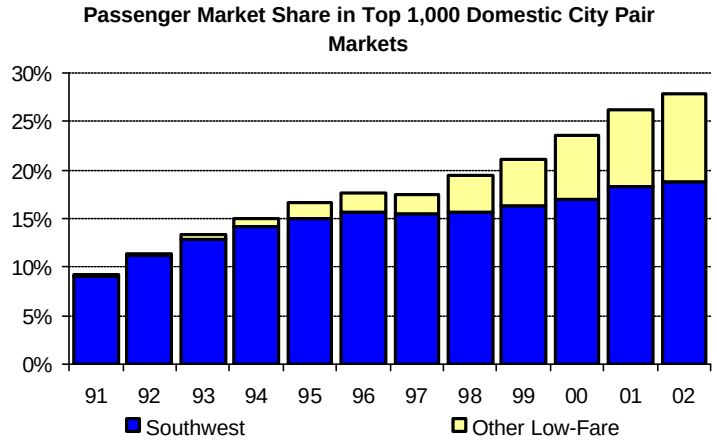
Best Low-Fare Carriers Also Delivering a Solid Product

While lower costs are the foundation of a successful low-fare carrier, we believe that building and sustaining a franchise and brand is also important. It is not necessary, in our view, that carriers create an upscale brand image, but it is necessary to have a reasonably priced, well executed (on time, with bags), consistent product offering along with good customer service. We believe these product attributes are as much a part of Southwest's historical success as low costs. Developing low-fare carriers like AirTran and JetBlue are meeting these criteria and building high frequency schedules that appeal to business travelers, offering good customer service, and providing on-board amenities. In both of these particular cases, the carriers are also flying brand new aircraft, which appeal to many consumers.

Low Fares and Solid Products Luring Passengers Away from Network Airlines

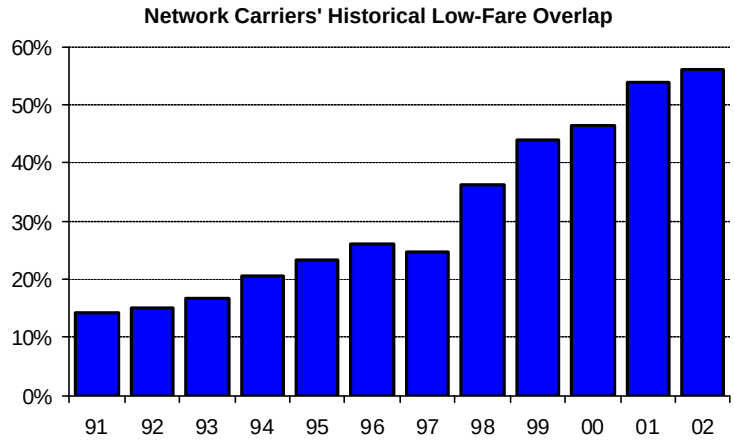
Reduced fares, simplified fare structures, and good customer service in combination are driving strong market share gains for the low-fare carriers in the domestic entity. According to data filed with the Department of Transportation, these airlines carried approximately 28% of domestic passengers in 2002, up from 9% in 1991 (Figure 22). In addition to increasing their market share, these carriers now touch much larger portions of the network airlines' route structures than they have at any time in the past (Figure 23). Rapid expansion of these carriers will likely see increased competitive overlap on the route networks of the network airlines from these carriers. In fact, we believe that the low-fare carriers as a group, though much smaller than the network carriers, will add more aircraft, net of retirements, to their fleets than the majors over the next several years (Figure 24).

Figure 22 – Lower, Simplified Fares and Solid Products Driving Rapid Market Share Gains



Source: DOT Databank 1B.

Figure 23 – Low-Fare Carriers Touching Growing Portions of Major Airline Networks



Source: DOT Databank 1B.

Figure 24 – Despite Much Smaller Size, Low-Fare Carriers Will Add More Net Aircraft to Their Fleets Next Several Years than the Majors

Airline Industry Net Deliveries			
Carrier	**2004**	**2005**	**2006**
Low Fare Airlines			
AAI	6	9	17
ALK	1	2	3
AWA	(6)	15	16
JBLU	18	29	38
LUV	17	37	40
Total	**36**	**92**	**114**
Network Airlines			
AMR	(47)	12	32
CAL	3	4	0
DAL	(15)	21	22
NWAC	(4)	(3)	7
Total	**(63)**	**34**	**61**

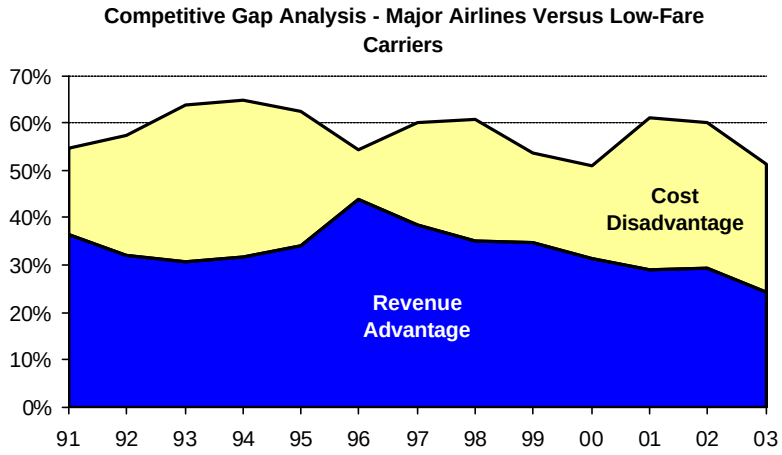
Source: Company reports, BACK Aviation.

Network Airlines Have Historically Enjoyed Revenue Premiums, But Premiums More than Offset by Cost Disadvantages

The simplified nature of low-fare airline operations clearly has cost benefits relative to the complexity of the network airline model. However, the network airlines offer a product that has historically commanded a revenue premium (first class cabins, comprehensive networks with high frequency and access to wide array of destinations, and extensive frequent flyer programs).

Revenue premiums form competitive advantages if and only if the revenue generated from those premiums exceeds the cost of generating them. Unfortunately, in the case of the network airlines, revenue premiums are not compensating for the cost disadvantages that the network airlines suffer (Figure 25). This competitive gap also highlights the need for further change.

Figure 25 – Network Airlines Have Enjoyed Revenue Premiums, But Those Premiums Have Been Offset by Cost Disadvantages



Source: DOT Form 41, DOT Databank 1B.

VI. THE PROBLEM IS COST, NOT THE FUNDAMENTAL DESIGN OF THE HUB AND SPOKE MODEL

Any debate on the competitive dynamics existing between low-fare carriers and the network airlines inevitably provokes the question of whether or not the hub and spoke model is obsolete. From our vantage point, there is nothing inherently illogical or uneconomical about the basic concept of a hub and spoke model. Given the state of aircraft technology, there are significant cost advantages of aggregating passengers to take advantage of larger aircraft. Absent a material advance in aircraft technology, therefore, we believe the hub and spoke model is an economically desirable model for at least a portion of the United States airline industry.

Many city-pair markets in the country simply would not be viable without a hub and spoke system. For example, in 2001 passengers could fly between Buffalo, New York and Fort Wayne, Indiana several times a day even though less than 1,000 passengers actually traveled on that exact itinerary during the year (Figure 26). No carrier has costs low enough to support frequent point-to-point service in a market that size. Without a hub and spoke system, passengers, other than in very large cities, would have nowhere near the convenience they now enjoy.

Figure 26 – Hub and Spoke System Brings Convenient Travel Options to Small and Medium Sized Cities

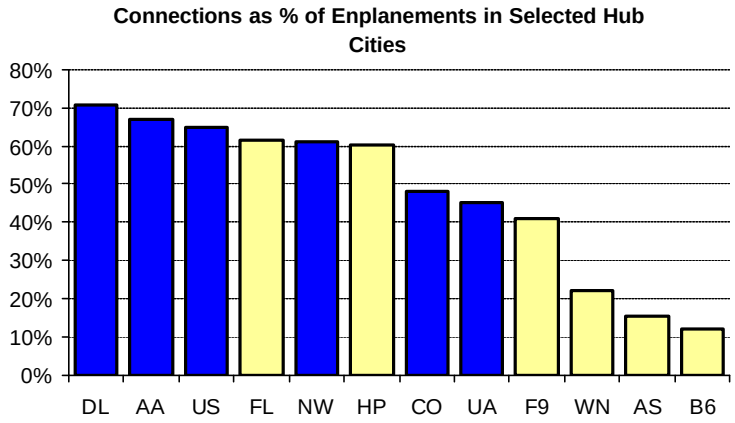
Market Analysis - Buffalo, NY to Ft. Wayne, IN (2001) - Avg. Fare - $228

Hub	Carrier	Passengers Inbound	Outbound	Total
ORD	AA	60	70	130
	UA	40	40	80
CLE	CO	20	20	40
CVG	DL	90	70	160
DTW	NW	550	580	1,130
PIT	US	130	110	240
Total		**890**	**890**	**1,780**

Source: DOT Databank 1B.

We also believe that several low-fare carriers are successfully operating what are at least quasi-hub networks. AirTran, Frontier, and even Southwest carry a significant number of connecting passengers in their largest cities (Figure 27). We believe these carriers are proving that a low-cost, high efficiency hub and spoke network is not only theoretically possible, but achievable.

Figure 27 – Many Low-Fare Airlines Carry Significant Connecting Volume in Their Larger Cities



Source: DOT Databank 1B, DOT T-100.

Given the inherently logical underpinnings of the hub and spoke model and evidence to suggest that with the right cost structure it can be economically viable, we believe hub and spoke airlines will play an important role in the transportation infrastructure of the United States for the foreseeable future. We believe costs are the reason the network airlines have struggled financially, rather than a conceptual flaw in basic network design.

VII. FINANCIAL STATE OF THE INDUSTRY AT LARGE IS STILL PRECARIOUS; NETWORK AIRLINES HAVE MORE RESTRUCTURING AHEAD

The airline industry at large still finds itself in a precarious financial condition. While we believe certain low-fare carriers will continue to be successful, we believe the network airlines must make further strides in restructuring their businesses over the next several years. That process will likely be a painful one that could involve sacrifice on the part of different stakeholders.

Over the last several years, the network airlines have undertaken a number of different initiatives to reduce cost and improve profitability. Our analysis suggests that those initiatives have generated non-labor cost savings of some significance. Despite rising labor and fuel costs, the industry has been able to reduce costs as a result of these non-labor cost savings.

However, the combination of a sharp and seemingly permanent demand reduction, soaring fuel prices, and rapid growth of increasingly capable low-fare carriers will likely require further cost cutting. The network airlines should also take steps to share both the risk and upside of business cycles to reduce the financial impact of boom and bust cycles on the industry.

Unfortunately, there is no apparent solution to these problems that will allow stakeholders to avoid sacrifice. Niche strategies focusing on business travelers are unlikely to be economically viable, at least for the network airlines. We believe that few economies of scale exist in the industry. Without verifiable economies of scale, we are hard pressed to believe that consolidation is an easy solution to the industry's current woes.

The need for change on the part of the network airlines is manifest in the financial position in which those carriers now find themselves. The industry must continue to reduce non-labor unit costs where the carriers still suffer cost disadvantages to the best low-fare carriers, but these carriers will likely need to further reduce labor costs as well in order to remain viable for the long-term. While certain events could transpire to change the timing or urgency of sacrifice (plummeting fuel prices or a sudden revenue rebound among others), we see little chance that sacrifice will not ultimately be necessary.

Thank you again for the opportunity to address you on this timely subject. I will be happy to answer any questions you may have.

APPENDIX – Airline Designator Codes

Airline Designator Codes

Designator Code	Airline	Stock Ticker
AA	American	AMR
CO	Continental	CAL
DL	Delta	DAL
NW	Northwest	NWAC
WN	Southwest	LUV
FL	AirTran	AAI
AS	Alaska	ALK
HP	America West	AWA
B6	JetBlue	JBLU
TZ	American Trans Air	ATA
UA	United	UAL
US	US Airways	UAIR
F9	Frontier	FRNT
NK	Spirit	NA